

**Marine Endangered Species Monitoring Program
Hopper Dredging Project Summary
Navarre Beach, Florida
Beach Replenishment
SAJ-2003-10496-IP-EPS**

**US Army Corps of Engineers - Jacksonville District
Weeks Marine, Inc. / Coastal Tech / ECO, Inc.
26 Mar-24 Jul 2006 and 29 Sep-12 Nov 2006**



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ABSTRACT

*A twenty-four-hour-per-day endangered species monitoring program was conducted onboard the hopper dredges B.E. Lindholm and RN Weeks from 26 March – 24 July and 29 September – 12 November 2006. Endangered and threatened species targeted include Loggerhead (*Caretta caretta*), Kemp's Ridley (*Lepidochelys kempii*), Green (*Chelonia mydas*), Hawksbill (*Eretmochelys imbricata*, and Leatherback (*Dermochelys coriacea*) sea turtles. Observer monitoring was provided by East Coast Observers, inc. (ECO, inc.) and was at 100% coverage using two observers approved by the National Marine Fisheries Service (NMFS). This project was contracted through Weeks Marine Inc., Dredging Company.*

INTRODUCTION

The endangered species observers conducted twenty four hour monitoring aboard the hopper dredges B.E. Lindholm and RN Weeks for one hundred sixty seven days of a 3.6 miles beach replenishment project off the coast of Navarre Beach, Florida. Pursuant to agreements with NMFS, two certified observers were required to work onboard each dredge in 12 hour shifts allowing coverage 24 hours per day. Sea Turtle Relocation Trawling was provided by East Coast Observers, Inc.

SCOPE OF WORK

East Coast Observers, Inc. was subcontracted by Weeks Marine, Inc to conduct onboard endangered species monitoring. ECO, inc. was to provide necessary trained personnel and relevant equipment to inspect, clean and monitor inflow screening located onboard the Dredges B.E. Lindholm and RN Weeks. Observers were also required to monitor the draghead and draghead deflector each time they were brought onboard for cleaning and maintenance, and complete load data sheets for each subsequent load. Any death or injury to endangered species was to be identified, measured, photographed and logged. Proper disposal of said species was to be performed by the observer and dredge personnel. Load sheets were to be completed for each individual load, and included pertinent information to each load. Load start and stop times, condition of screening and draghead deflector, type of material dredged, weather and sea conditions, screen contents and species bycatch. Any take information was to be noted on the load data sheet, and then detailed in a separate incident report. Daily and weekly summary forms were to be completed and given to dredge and USACE personnel. Bridge watches were assigned to the observer when not occupied with screen and draghead inspection duties.

The Dredge B.E. Lindholm began dredging at 2024 hrs on 26 March 2006 through 18 April 2006. On 18 April 2006 the B.E. Lindholm was replaced by the RN Weeks which

began dredging at 0705hrs and completed its last load on 01 July 2006 at 0015 hrs. On 20 May 2006 the B.E. Lindholm returned to the project to work in conjunction with the RN Weeks until the RN Weeks left for the ship yard on 05 July 2006. The B.E. Lindholm completed its last load for the first portion of the project on 24 July 2006 at 0700 hrs.

During this first portion of the project there were three (3) incidental turtle takes on board the B.E. Lindholm.

The first, a Kemp's Ridley, occurred on 31 March 2006 at 0443 hrs. All dredging operations were suspended until a sea turtle compliance risk assessment could be performed. Dredging resumed on 04 April 2006 at 1620hrs. The second incidental take, a Loggerhead, occurred on 16 June 2006 at 1316 hrs. All dredging operations were suspended until a sea turtle compliance risk assessment could be performed. Dredging resumed on 17 June 2006 at 1350 hrs. The third incidental take, a Loggerhead, occurred on 01 July 2006 at 0047 hrs. All dredging was suspended at this time.

On 10 July 2006, a modification to the permit was issued, authorizing an additional ten (10) days of hopper dredging so a gap in the berm could be closed. Operations resumed on 10 July 2006 at 1230 hrs. On 20 July 2006 another modification to the permit was issued for an additional five (5) days of hopper dredging to complete the closure of the gap. Once the gap was closed all operations were suspended until the beginning of the new fiscal year.

Authorization to resume hopper dredging of the Navarre Beach Restoration was granted on 18 August 2006. Dredging resumed with the RN Weeks 29 September 2006 at 1700 hrs and concluded on 12 November 2006 at 0922 hrs. During the second phase of dredging operations there were no incidents involving endangered species onboard the dredge.

Sea Turtle Relocation Trawling successfully relocated sixty-seven (67) threatened and endangered sea turtles during the projects duration. There were two (2) incidental takes on board the F/V Jana Lin, occurring on 05 June 2006 and 14 July 2006, both were Loggerheads.

RESULTS

Project Date: 26 March – 24 July 2006 and 29 September – 12 November 2006

Project Length: 167 days

Coverage Level: 100% onboard dredge

Total Number of Takes: 3 (1 *L. kempii*, 2 *C.caretta*)

Number of Loads: 1311

Water Temperature: Surface 66-88°F

Air Temperature: 50-94°F

Table 1. Total by-catch for project duration

| By-catch | Total |
|------------------------|--------------|
| Bank Cusk Eel | 3 |
| Blue Crab | 8 |
| Crayfish | 2 |
| Electric Ray | 1 |
| Gulf Flounder | 1 |
| Hermit Crab | 2 |
| Leopard Sea robin | 4 |
| Lightening Whelk | 1 |
| Spotted Eel | 19 |
| Unidentified Crab | 31 |
| Unidentified Eel | 9 |
| Unidentified Flatfish | 2 |
| Unidentified Octopi | 4 |
| Unidentified Sea robin | 21 |
| Unidentified Sea star | 19 |
| Unidentified Skate | 1 |
| Yellow Conger Eel | 1 |